



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
EMERGENCY RESPONSE BRANCH 1  
25089 CENTER RIDGE ROAD  
WESTLAKE, OH 44145

SEP 23 2010

EPA Region 5 Records Ctr.



374362

**MEMORANDUM**

SUBJECT: ACTION MEMORANDUM - Request for a Time-Critical Removal Action at the Plate-Rite Plating Site, Dayton, Montgomery County, Ohio (Site ID #B5YL)

FROM: Steve Renninger, On-Scene Coordinator  
Emergency Response Branch - Section 1

THRU: Jason H. El-Zein, Branch Chief  
Emergency Response Branch

TO: Richard C. Karl, Director  
Superfund Division

**I. PURPOSE**

The purpose of this memorandum is to request and document your approval to expend up to \$930,967 to conduct a time-critical removal action at the Plate-Rite (PR) Plating Site, located in Dayton, Montgomery County, Ohio. The response actions proposed herein are necessary in order to mitigate threats to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances at the PR Plating Site, a former nickel and chrome electroplating facility. The presence of hazardous substances existing at the Site has been documented, including corrosive, caustic, flammable, toxic heavy metal substances and cyanide-bearing wastes in plating vats, drums and containers.

In a letter dated June 18, 2010, the Harrison Township Fire Department (HTFD) requested assistance from the U.S. EPA to address unsafe conditions at the Site and to conduct a potential time critical removal action. HTFD noted that the Site was abandoned, that it contained numerous fire code violations and that since 2007, there have been 8 cases of trespassing on the property. In addition, the HTFD observed approximately 21 plating tanks, three underground storage tanks (USTs) and approximately 200 drums and containers containing acids, caustics, flammables and cyanides. In a letter dated August 17, 2010, the Ohio Environmental Protection Agency (Ohio EPA) verified the findings of the HTFD and requested assistance from U.S. EPA in conducting a potential time-critical removal action involving abandoned and leaking containers containing hazardous chemicals.

The time-critical removal action proposed herein will mitigate the threats by properly identifying, consolidating, packaging, and ultimately removing and disposing off-site the abandoned hazardous substances, pollutants and contaminants. Additional Site activities will include Site security, perimeter air monitoring, building decontamination as needed, and pumping out tanks and vats, most of which will need to be dismantled to complete the removal action. This response action will be conducted in accordance with Section 104(a)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9604(a)(1), to abate or eliminate the immediate threat posed to public health and/or the environment by the presence of the hazardous substances. The uncontrolled conditions of the hazardous substances present at the PR Plating Site require that this action be classified as a time-critical removal action. The project will require approximately 60 working days to complete.

There are no nationally significant or precedent setting issues associated with the PR Plating Site. The PR Plating Site is not on the National Priorities List.

## **II. SITE CONDITIONS AND BACKGROUND**

The CERCLIS ID # for this Site is: OHN 000 510 495

### **A. Physical Location and Description**

The PR Plating Site is located at 5311 Webster Street, in Dayton, Montgomery County, Ohio, 45414 (Figure A-1) in a mixed residential, commercial, and industrial area. The Site is bordered to the north by a residential property, to the south by a commercial building, to the east by a residential property and Webster Street, and to the west by a wooded area (Figure A-2). Private residential properties are located within 200 feet of the PR Plating Site. The PR Plating Site (also known as Plate-Rite Co., Inc. and Master Vision Plating, LLC) began operating in 1985 and stopped plating operations in 2007. The PR Plating Site is currently owned by the Bohn-Jur Co., and includes one 13,100 square-foot (SF) building. A Site Layout Map is provided in Figure A-2. The geographical coordinates for the Site are 39° 49' 2.28" North latitude and 84° 10' 51.996" West longitude.

The area surrounding the PR Plating Site was screened for Environmental Justice (EJ) concerns using Region 5's EJ Assist Tool. Census tracts with a score of 1, 2, or 3 are considered to be high-priority potential EJ areas of concern according to EPA Region 5. The PR Plating Site is in a census tract with a score of 3 (Attachment 3). Therefore, Region 5 considers this Site to be a high-priority potential EJ area of concern.

### **B. Site Background**

In February 1985, the Plate-Rite Co., Inc. initiated plating operations at the PR Plating Site and provided products to various industries, such as the medical, food service, appliance, automotive and tool room industries. The company provided electroplating on a host of surfaces,

including aluminum, cast iron, carbon steel, stainless steel, brass, copper and zinc castings. The company was also experienced in working with plating finishes that extended to copper, multi-layer nickel, decorative chrome, polished nickel chrome, nickel plate satin finish and gold. On August 3, 2005, the company voluntarily dissolved.

In December 2005, Master Vision (MV) Plating was formed by Ernie Powers. MV Plating leased the property from the Bohn-Jur Co. and conducted electroplating operations until 2007.

As of August 2010, the property is abandoned and still has electric services, but only to operate the electronic gate at the front entrance.

#### C. Ohio EPA Background

In a letter dated June 22, 2010, the Ohio EPA issued a Notice of Violation (NOV) to the owners of the PR Plating Site (Bohn-Jur Co.). Ohio Administrative Code 3745-52-11 requires that any person generating a waste must evaluate the waste to determine if it is a characteristic or listed hazardous waste. The Ohio EPA NOV reported that the Bohn-Jur Co. had failed to evaluate any of the wastes on site to determine if they are hazardous. In order to begin abating the violation, Ohio EPA requested the Bohn-Jur Co. to submit an inventory of all of the chemicals stored on site within 10 days of receipt of the NOV letter.

In a letter dated August 17, 2010, the Ohio Environmental Protection Agency (Ohio EPA) verified the findings of the HTFD and requested assistance from U.S. EPA in conducting a potential time-critical removal action involving abandoned and leaking containers containing hazardous chemicals.

#### D. Harrison Township Fire Department Background

In a letter dated June 18, 2010, the HTFD requested assistance from U.S. EPA to address unsafe conditions at the Site and to conduct a potential time critical removal action. HTFD noted that the Site was abandoned, that it contained numerous fire code violations and that since 2007, there have been 8 cases of trespassing on the property. In addition, the HTFD observed approximately 21 plating tanks, three USTs and approximately 200 drums and containers containing acids, caustics, flammables and cyanides.

#### E. U.S. EPA Background

On July 22, 2010, U.S. EPA mobilized its Superfund Technical Assessment and Response Team (START) contractor to the Site. U.S. EPA tasked START to perform a Site Investigation including sample collection and hazardous waste inventory. Activities performed during the Site Investigation included:

- Documentation of current Site conditions;

- Inventory of all plating vats, drums and containers;
- Calculating volume estimates of plating vat and tank materials; and
- Collecting plating vat, drum and container samples for laboratory chemical analysis.

During the U.S. EPA Site Investigation, OSC Renninger noted the presence of abandoned chemical waste including approximately 21 plating vats, three underground storage tanks (USTs), a laboratory and approximately 200 drums and containers. OSC Renninger also noted that the plating vats, drums and containers were deteriorated, with contents spilled onto the floor and near drain areas. In addition, during the site assessment, a representative from the HTFD indicated that vandals broke into the facility during the weekend of July 17, 2010.

OSC Renninger documented that the waste in plating vats, drums and containers included toxic heavy metals, corrosive, caustics, ignitable and reactive (cyanide) wastes. The U.S. EPA Site Investigation sampling results are found in Table 1, and significant results are discussed below.

OSC Renninger reviewed the laboratory sample results for the PR Plating Site on August 3, 2010. The Site Investigation analytical results indicated plating vat liquid sample S-10 documented a Toxicity Characteristic Leaching Procedure (TCLP) arsenic concentration of 17.1 milligrams per liter (mg/L). The analytical results from this sample indicated a TCLP arsenic concentration greater than the TCLP arsenic regulatory level of 5.0 mg/L, which verifies the characteristic of a hazardous waste for toxicity (D004). Analytical results from plating vat liquid sample S-6 documented a TCLP cadmium concentration of 3.40 mg/L, which exceeds the TCLP cadmium regulatory level of 1.0 mg/L, verifying the characteristic of a hazardous waste for toxicity (D006). Analytical results from plating vat liquid samples S-6, S-9 and S-10 and drum liquid sample S-11 documented TCLP chromium concentrations of 484 mg/L, 26,600 mg/L, 222,000 mg/L and 11,800 mg/L, respectively, which all exceed the TCLP chromium regulatory level of 5.0 mg/L, verifying the characteristic of a hazardous waste for toxicity (D007). Analytical results from plating vat liquid sample S-10 documented a TCLP lead concentration of 45.8 mg/L, which exceeds the TCLP lead regulatory level of 5.0 mg/L, verifying the characteristic of a hazardous waste for toxicity (D008).

Analytical results from lab bottle samples S-2 through S-4, plating vat samples S-6, S-9, S-10 and S-14 and drum samples S-12 and S-13 documented liquid having a pH of 1.15, 0.00, 0.00, 0.56, 1.19, 0.74, 1.21, 0.00 and 0.00 standard units, respectively. Analytical results from lab bottle sample S-1 documented liquid having a pH of 13.0 standard units. Analytical results from lab bottle samples S-2 through S-4, plating vat samples S-6, S-9, S-10 and S-14 and drum samples S-12 and S-13 indicate pH levels less than 2 standard units, and analytical results from liquid sample S-1 indicates a pH level greater than 12.5 standard units. All ten of these results verify the characteristic of a hazardous waste for corrosivity (D002).

Analytical results from samples S-5 and S-19 documented liquid having a flash point of 73.2 degrees Fahrenheit (°F). Both samples show liquid with a flash point less than 140°F, which verifies the characteristic of a hazardous waste for ignitability (D001).

The analytical result from plating vat liquid sample S-7 documented a total cyanide concentration of 88,600 mg/L. The analytical results from drum samples S-8, S-16 and S-17 documented total cyanide concentrations of 244,000; 350,000; and 438,000 milligrams per kilogram (mg/kg), respectively. The analytical result from the floor solid sample shows a total cyanide concentration of 64.7 mg/kg. All five of these samples document cyanide-bearing waste, which verifies the characteristic of a hazardous waste for reactivity (D003).

**TABLE 1**  
**U.S. EPA SAMPLING RESULTS**  
**July 22, 2010 Site Investigation**

Parameter	Regulatory Limit	Sample Designation				
		S-1	S-2	S-3	S-4	S-5
Flashpoint (°F)	< 140 °F	NA	NA	NA	NA	<b>73.2</b>
TCLP Arsenic (mg/L)	5.0	NA	NA	NA	NA	NA
TCLP Cadmium (mg/L)	1.0	NA	NA	NA	NA	NA
TCLP Chromium (mg/L)	5.0	NA	NA	NA	NA	NA
TCLP Lead (mg/L)	5.0	NA	NA	NA	NA	NA
Total Cyanide	No Regulatory Limit	NA	NA	NA	NA	NA
pH	Liquid Sample Less than 2.0 or Greater than 12.5	<b>1.10</b>	<b>1.15</b>	<b>0.00</b>	<b>0.00</b>	NA
Container type		Lab bottle	Lab bottle	Lab bottle	Lab bottle	Lab bottle
Label Information		Sodium Hydroxide	Sulfuric Acid	Hydrochloric Acid	Nitric Acid	Flammable Liquid

< = Less than

TCLP = Toxicity Characteristic Leaching Procedure

mg/L – milligrams per liter

mg/kg – milligrams per kilogram

°F – Degrees Fahrenheit

Bolded and Shaded results indicate Regulatory Level exceedances or a cyanide-bearing waste

NA – Not analyzed

**TABLE 1 (continued)**  
**U.S. EPA SAMPLING RESULTS**  
**July 22, 2010 Site Investigation**

Parameter	Regulatory Limit	Sample Designation				
		S-6	S-7	S-8	S-9	S-10
Flashpoint (°F)	< 140 °F	NA	NA	NA	NA	NA
TCLP Arsenic (mg/L)	5.0	ND	NA	NA	ND	<b>17.1</b>
TCLP Cadmium (mg/L)	1.0	<b>3.40</b>	NA	NA	ND	ND
TCLP Chromium (mg/L)	5.0	<b>484</b>	NA	NA	<b>24,600</b>	<b>222,000</b>
TCLP Lead (mg/L)	5.0	ND	ND	ND	ND	<b>45.8</b>
Total Cyanide	No Regulatory Limit	NA	<b>88,600 mg/L</b>	<b>244,000 mg/kg</b>	NA	NA
pH	Liquid Sample Less than 2.0 or Greater than 12.5	<b>0.56</b>	9.88	NA	<b>1.19</b>	<b>0.74</b>
Container type		Plating Vat	Plating Vat	Fiber Drum	Plating Vat	Plating Vat
Label Information		Vat #20 (Acid)	Vat #18 (Cyanide)	Copper Cyanide Solids	Vat #14 (Chrome)	Vat #15 (Chrome Saver)

< = Less than

TCLP = Toxicity Characteristic Leaching Procedure

mg/L – milligrams per liter

mg/kg – milligrams per kilogram

°F – Degrees Fahrenheit

Bolded and Shaded results indicate Regulatory Level exceedances or a cyanide-bearing waste

NA – Not analyzed

ND – Not detected

**TABLE 1 (continued)**  
**U.S. EPA SAMPLING RESULTS**  
**July 22, 2010 Site Investigation**

Parameter	Regulatory Limit	Sample Designation				
		S-11	S-12	S-13	S-14	S-15
Flashpoint (°F)	< 140 °F	NA	NA	NA	NA	NA
TCLP Arsenic (mg/L)	5.0	ND	NA	NA	NA	ND
TCLP Cadmium (mg/L)	1.0	ND	NA	NA	NA	ND
TCLP Chromium (mg/L)	5.0	<b>11.300</b>	NA	NA	NA	1.42
TCLP Lead (mg/L)	5.0	ND	NA	NA	NA	ND
Total Cyanide (mg/kg)	No Regulatory Limit	NA	NA	NA	NA	<b>64.7</b>
pH	Liquid Sample Less than 2.0 or Greater than 12.5	2.61	<b>0.00</b>	<b>0.00</b>	<b>1.21</b>	NA
Container type		55-gallon drum	30-gallon drum	30-gallon drum	Plating Vat	Floor Solids
Label Information		Chrome pit	Sulfuric Acid	Hydrochloric Acid	Vat #7 (Acid)	White solids

< = Less than

TCLP = Toxicity Characteristic Leaching Procedure

mg/L – milligrams per liter

mg/kg – milligrams per kilogram

°F – Degrees Fahrenheit

Bolded and Shaded results indicate Regulatory Level exceedances or a cyanide-bearing waste

NA – Not analyzed      ND – Not detected



**TABLE 1 (continued)**  
**U.S. EPA SAMPLING RESULTS**  
**July 22, 2010 Site Investigation**

Parameter	Regulatory Limit	Sample Designation			
		S-16	S-17	S-18	S-19
Flashpoint (°F)	< 140 °F	NA	NA	149	<b>732</b>
TCLP Arsenic (mg/L)	5.0	NA	NA	NA	NA
TCLP Cadmium (mg/L)	1.0	NA	NA	NA	NA
TCLP Chromium (mg/L)	5.0	NA	NA	NA	NA
TCLP Lead (mg/L)	5.0	NA	NA	NA	NA
Total Cyanide (mg/kg)	No Regulatory Limit	<b>350,000</b>	<b>438,000</b>	NA	NA
pH	Liquid Sample Less than 2.0 or Greater than 12.5	NA	NA	NA	NA
Container type		Fiber drum	Steel drum	1-gallon container	8-ounce container
Label Information		Zinc Cyanide (solids)	Cyanogen (solids)	Paint Thinner	Flammable Liquid

< = Less than

TCLP = Toxicity Characteristic Leaching Procedure

mg/L – milligrams per liter

mg/kg – milligrams per kilogram

°F – Degrees Fahrenheit

Bolded and Shaded results indicate Regulatory Level exceedances or a cyanide-bearing waste

NA – Not analyzed

### **III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES**

The conditions present at the PR Plating Site present an imminent and substantial threat to the public health, or welfare, and the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), as amended, 40 C.F.R. Part 300. These factors include, but are not limited to, the following:

**1) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;**

During the July 22, 2010, U.S. EPA Site Investigation, the OSC documented abandoned chemical waste including drums and containers containing corrosive, caustic and flammable liquids, and plating vats and drums containing TCLP arsenic, TCLP cadmium, TCLP chromium, TCLP lead and cyanide-bearing wastes at the PR Plating Site.

The OSC also noted drums and tanks in a deteriorated condition with waste spilled on the floor in many locations, including adjacent to the floor drains. Analytical results from plating vat liquid sample S-10 documented a TCLP arsenic concentration of 17.1 mg/L. The analytical results from this sample indicated a TCLP arsenic concentration greater than the TCLP arsenic regulatory level of 5.0 mg/L, which verifies the characteristic of a hazardous waste for toxicity (D004). Analytical results from plating vat liquid sample S-6 documented a TCLP cadmium concentration of 3.40 mg/L, which exceeds the TCLP cadmium regulatory level of 1.0 mg/L, verifying the characteristic of a hazardous waste for toxicity (D006). Analytical results from plating vat liquid samples S-6, S-9 and S-10 and drum liquid sample S-11 documented TCLP chromium concentrations of 484 mg/L, 26,600 mg/L, 222,000 mg/L and 11,800 mg/L, respectively, which all exceed the TCLP chromium regulatory level of 5.0 mg/L, verifying the characteristic of a hazardous waste for toxicity (D007). Analytical results from plating vat liquid sample S-10 documented a TCLP lead concentration of 45.8 mg/L, which exceeds the TCLP lead regulatory level of 5.0 mg/L, verifying the characteristic of a hazardous waste for toxicity (D008).

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The analytical result from plating vat liquid sample S-7 documented a total cyanide concentration of 88,600 mg/L. The analytical results from drum samples S-8, S-16 and S-17 documented total cyanide concentrations of 244,000; 350,000; and 438,000 milligrams per kilogram (mg/kg), respectively. The analytical result from the floor solid sample shows a total cyanide concentration of 64.7 mg/kg. All five of these samples document cyanide-bearing waste, which verifies the characteristic of a hazardous waste for reactivity (D003). Waste documented in plating vats, drums, and containers include corrosive, caustic, toxic heavy metal, flammable and cyanide-bearing wastes.

Commercial businesses are located within 500 feet of the Site and residential locations are located within 200 feet of the Site. The PR Plating Site is fenced and the doors are locked, but since 2007, there have been 8 reports of trespassing, and most recently during the weekend of July 17, 2010, trespassers broke through a door on the north side of the property and entered the building. Even with the restricted access onto the Site, trespassing may still occur and an accidental or intentional release of hazardous material, contact with hazardous materials, and/or a reaction generating toxic gases (hydrogen cyanide) is possible. The close proximity of residential areas and commercial businesses immediately adjacent to the Site would greatly increase the likelihood of human health and environmental impacts should such an occurrence take place. The plating vats and drums of material are located inside the building with little to no secondary containment. Potential exposure could occur through each of these migration pathways and cause imminent endangerment to human health and the environment.

Arsenic - Exposure to arsenic can be through ingestion, inhalation, or skin absorption. Once absorbed, arsenic is widely distributed throughout the body tissues, including the liver, abdominal viscera, bone, and skin. Acute arsenic poisoning in humans is usually through accidental or intentional ingestion. Although rare, acute poisoning may be followed by difficulty swallowing, irritation of the mouth, epigastric pain, vomiting, and diarrhea, followed by stupor, coma, and death. Long-term arsenic exposure is linked to liver, lung, prostate, bladder, kidney, and non-melanoma skin cancers. Arsenic apparently is not linked to Non-Hodgkin's lymphoma or other leukemias.

Cadmium - Breathing high levels of cadmium can severely damage the lungs. Eating food or drinking water with very high levels severely irritates the stomach, leading to vomiting and diarrhea. Long-term exposure to lower levels of cadmium in air, food, or water leads to a buildup of cadmium in the kidneys and possible kidney disease. Other long-term effects are lung damage and fragile bones.

Chromium - Chromium is a naturally occurring element, however, hexavalent chromium is generally produced by industrial processes such as chrome plating and finishing. The health effects of exposure to trivalent and hexavalent chromium has been researched and well documented. Existing information about chromium, especially hexavalent chromium, is mainly related to worker exposure. Plating industry workers and workers in other industries utilizing chromium are most susceptible to toxic levels. Hexavalent and trivalent chromium can be toxic at high levels, however, hexavalent chromium is the most toxic. Chromium is also listed under D007 as a hazardous waste. According to the National Institute of Occupational Safety and Health (NIOSH), the immediately dangerous to life and health (IDLH) level for chromium (III) is 250 milligrams per cubic meter ( $\text{mg}/\text{m}^3$ ).

Lead - Lead enters the human body (the exposure pathway) through ingestion and inhalation. Lead is a carcinogen, and the long-term health effects of lead can be severe. Long-term exposure may affect development of the nervous systems of young children. Significant exposure can cause learning difficulties and stunted growth in children. At high levels, reaction time may decrease, and memory loss and possible weakness may occur in the fingers, wrists, or ankles.

Cyanide - Cyanide compounds are used in plating baths because they accommodate a wide range of electrical current, remove tarnish or other undesirable films from surfaces to be plated, and cause an even metal deposit to form that has lower sensitivity to impurities present in the bath. Metal coatings of cadmium, iron, gold, and zinc often use cyanide compounds. Cyanide is typically found co-existing with plating metals, or as sodium cyanide or potassium cyanide, which is added to the bath. Cyanide exposure pathways include inhalation, ingestion, or absorption through skin or mucous membranes. Most cyanides are acutely poisonous. Overexposure interferes with the operation of the metabolic system and can cause rapid death. Cyanide is not bioaccumulated or stored in humans or animals. Cyanide is extremely toxic to humans. Acute (short-term) inhalation exposure to  $100 \text{ mg}/\text{m}^3$  or more of hydrogen cyanide will cause death in humans. Acute exposure to lower concentrations ( $6$  to  $49 \text{ mg}/\text{m}^3$ ) of hydrogen cyanide will cause a variety of effects in humans, such as weakness, headache, nausea, increased rate of respiration, and eye and skin irritation. Chronic exposure to cyanide in humans via inhalation results in effects on the central nervous system, such as headaches, dizziness, numbness, tremor, and loss of visual acuity. Other effects in humans include cardiovascular and respiratory effects, an enlarged thyroid gland, and irritation to the eyes and skin.

**2) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;**

During the EPA Site Investigation, OSC Renninger observed and documented the presence of approximately 21 plating vats, a laboratory and approximately 200 drums and small containers of waste located throughout the building. U.S. EPA samples confirmed

the presence of corrosive, toxic, reactive (cyanide) and ignitable hazardous waste at the PR Plating Site. Numerous plating vats, drums and containers were uncovered and deteriorating, with contents spilled onto the floor. Continued deterioration of the drums may allow additional quantities of hazardous substances to migrate into the environment.

Trespassing (which has been occurring at the PR Plating Site, as mentioned in the background section and the previous section) could result in an accidental or intentional release of hazardous material, contact with hazardous materials, and/or a reaction generating toxic gases (hydrogen cyanide), such as when acid liquids mix with cyanide-bearing waste. The close proximity of the PR Plating Site to residential areas and commercial businesses greatly increases the potential threats to human health and environment, should such an occurrence take place.

**3) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;**

Southwestern Ohio receives a substantial amount of precipitation during spring, and winter temperatures are normally below freezing with regular snowfall. Weather conditions will contribute to the further deterioration of the building, drums, and vats.

**4) Threat of fire or explosion.**

Laboratory analysis documented liquid samples S-15 and S-19 having a flashpoint of 73.2°F, and defines the contents as characteristic hazardous waste for ignitability (D001). Therefore, the potential for a fire/explosion exists. If such an event occurs, contaminants could become airborne and may affect the nearby population.

**5) The availability of other appropriate Federal or State response mechanisms to respond to the release;**

In a letter dated June 18, 2010, the HTFD requested assistance from the U.S. EPA to address unsafe conditions at the PR Plating Site and to conduct a potential time-critical removal action. HTFD noted that the Site was abandoned, that it contained numerous fire code violations and that since 2007, there have been 8 cases of trespassing on the property. In addition, the HTFD observed approximately 21 plating tanks, three USTs and approximately 200 drums and containers containing acids, caustics, flammables and cyanides.

In a letter dated August 17, 2010, the Ohio EPA requested assistance from the U.S. EPA in conducting a potential time-critical removal action involving abandoned and leaking containers containing hazardous chemicals at the PR Plating Site.

#### **IV. ENDANGERMENT DETERMINATION**

Given the Site conditions, the nature of the known and suspected hazardous substances on the Site, and the potential exposure pathways described in Sections II and III, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

#### **V. PROPOSED ACTIONS AND ESTIMATED COSTS**

The OSC proposes to undertake the following response actions to mitigate threats posed by the presence of hazardous substances at the PR Plating Site:

1. Develop and implement a site-specific Health and Safety Plan, including an Air Monitoring Plan, and a Site Emergency Contingency Plan;
2. Develop and implement a Site Security Plan;
3. Inventory and perform hazard characterization on all substances contained in containers, drums, vats, and tanks;
4. Consolidate and package all hazardous substances, pollutants and contaminants for transportation and off-site disposal;
5. Dismantle and decontaminate process equipment, vats, tanks and building components associated with the plating area, as necessary;
6. Transport and dispose of all characterized or identified hazardous substances, pollutants, wastes, or contaminants to a RCRA/CERCLA-approved disposal facility in accordance with U.S. EPA's Off-Site Rule (40 C.F.R. § 300.440); and
7. Take any other response actions to address any release or threatened release of a hazardous substance, pollutant or contaminant that the EPA OSC determines may pose an imminent and substantial endangerment to the public health or the environment.

The removal action will be conducted in a manner not inconsistent with the National Contingency Plan (NCP). The OSC has initiated planning for provision of post-removal Site control consistent with the provisions of Section 300.415(l) of the NCP.

The threats posed by open and deteriorated tanks, vats, and drums containing substances considered hazardous meet the criteria listed in Section 300.415(b)(2) of the NCP and the response actions proposed herein are consistent with any long-term remedial actions which may be required. Elimination of hazardous substances, pollutants and contaminants that pose a substantial threat of release is expected to minimize substantial requirements for post-removal Site controls.

The estimated costs to complete the above activities are summarized below. These activities will require an estimated 60 on-site working days to complete. Detailed cleanup contractor costs are presented in Attachment 1.

### **REMOVAL PROJECT CEILING ESTIMATE**

#### **EXTRAMURAL COSTS:**

##### **Regional Removal Allowance Costs:**

Total Cleanup Contractor Costs	\$731,806
(Includes a 15% contingency).	

##### **Other Extramural Costs Not Funded from the Regional Allowance:**

Total START, including multiplier costs	+ \$ 44,000
Subtotal, Extramural Costs	
	\$775,806
Extramural Costs Contingency	+ \$155,161
(20% of Subtotal, Extramural Costs)	

#### **TOTAL, REMOVAL ACTION PROJECT CEILING**

**\$930,967**

The response actions described in this memorandum directly address the actual or threatened release of hazardous substances, pollutants, or contaminants at the Site which may pose an imminent and substantial endangerment to public health or welfare or to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

#### **Applicable or Relevant and Appropriate Requirements**

All applicable and relevant and appropriate requirements (ARARs) of Federal and State law will be complied with to the extent practicable. The OSC sent a letter dated August 24, 2010, to Dave Combs, Ohio EPA Southwest District Office, requesting state ARARs for the PR Plating Site. Any state ARARs identified in a timely manner will be complied with to the extent practicable.

All hazardous substances, pollutants or contaminants removed off-site pursuant to this removal action for treatment, storage and disposal shall be treated, stored, or disposed at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 C.F.R. § 300.440.

#### **VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

Delayed or no action will result in increased potential of the toxic and hazardous substances to release, thereby threatening the environment and the health and welfare of nearby persons who are in proximity to the PR Plating Site.

#### **VII. OUTSTANDING POLICY ISSUES**

None

#### **VIII. ENFORCEMENT**

For administrative purposes, information concerning the enforcement strategy for this Site is contained in the Enforcement Confidential Addendum.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$1,601,609<sup>1</sup>

$$(\$930,967 + \$59,760) + (61.66\% \times \$990,727) = \$1,601,609$$

#### **IX. RECOMMENDATION**

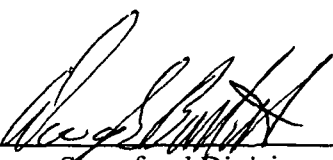
This decision document represents the selected removal action for the PR Plating Site located in Dayton, Montgomery County, Ohio. This document has been developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the Site, see Attachment II. Conditions at the Site meet the NCP § 300.415(b)(2) criteria for a time-critical removal action and I recommend your approval of the proposed removal action.

---

<sup>1</sup> Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgement interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States right to cost recovery.



The total removal project ceiling, if approved, will be \$930,967. Of this, an estimated \$886,967 may be used for the cleanup contractor costs. You may indicate your decision by signing below.

APPROVE:   
Director, Superfund Division

DATE: 9/23/10

DISAPPROVE: \_\_\_\_\_ DATE: \_\_\_\_\_  
Director, Superfund Division

#### Enforcement Addendum

#### Figures:

- A-1 Site Location Map
- A-2 Site Layout Map
- A-3 Site Features Map
- A-4 Photo Log

#### Attachments:

- I. Detailed Cleanup Contractor Cost Estimate
- II. Administrative Record Index
- III. Region 5 EJ Analysis
- IV. Independent Government Cost Estimate

cc: D. Chung, U.S. EPA, 5203-G  
M. Chezik, U.S. Department of Interior, **w/o Enf. Attachment**  
(email: michael\_chezik@ios.doi.gov)  
Chris Korleski, Director, Ohio EPA, **w/o Enf. Addendum**  
(email: Chris.Korleski@epa.state.oh.us)  
Kevin Clouse, Ohio EPA, **w/o Enf. Addendum**  
(email: Clouse.Kevin@epa.state.oh.us)  
Richard Cordray, Ohio Attorney General, **w/o Enf. Addendum**  
(email: Dale.Vitale@ohioattorneygeneral.gov)

**ENFORCEMENT CONFIDENTIAL ADDENDUM**

**PLATE RITE PLATING SITE  
DAYTON, MONTGOMERY COUNTY, OHIO**

**SEPTEMBER 2010**

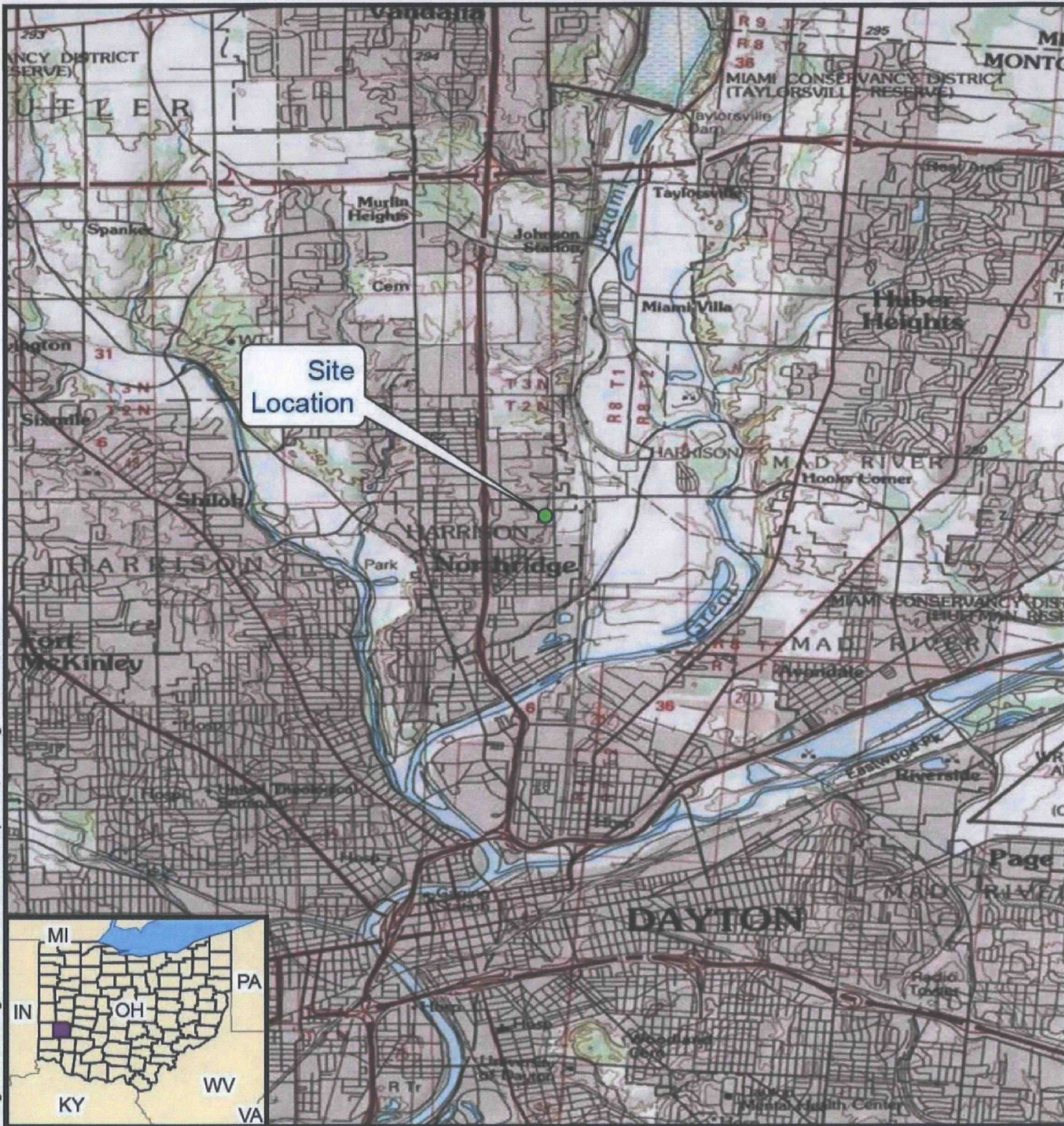
**(REDACTED 1 PAGE)**

**ENFORCEMENT CONFIDENTIAL  
NOT SUBJECT TO DISCOVERY**

**FIGURE A-1**

**SITE LOCATION MAP**





**Image Source:**  
National Geographic Society

0 0.5 1  
Miles



Prepared for:  
U.S. EPA Region 5

Contract No: EP-S5-06-04

TDD No.: S05-0001-1006-039  
DCN: 1109-4H-AHLJ



**WESTON**  
SOLUTIONS

Weston Solutions, Inc.  
4710-A Interstate Drive  
Cincinnati, OH 45246

**Figure A-1**  
Site Location Map  
Plate Right Plating Site  
Dayton, Montgomery County, Ohio



**FIGURE A-2**

**SITE LAYOUT MAP**



#### Legend

 Site Boundary

0 20 40  
Feet

**NOTES:**  
Image Source:  
OEPA



Prepared For:  
**U.S. EPA REGION V**  
Contract No.: EP-S5-06-04

TDD No.: S05-0001-1006-039  
DCN: 1109-4H-AHLJ

  
**WESTON SOLUTIONS, INC.**  
4710-A Interstate Drive  
Cincinnati, Ohio 45246

Figure A-2  
Site Layout Map  
Plate Right Plating Site  
Dayton, Montgomery County, Ohio

**FIGURE A-3**

**SITE FEATURES MAP**





Empty Drum Storage Area

Approximately 100 55-gallon Drums and 5-gallon Small Containers

Approximately 75 5-gallon Small Containers

Approximately 30 55-gallon Drums



#### Legend

- 5 gal Container
- 55 gal Drum
- Pit
- Tank
- Empty Drum Storage Area
- Facility Infrastructure

0 9 18  
Feet

Vat #1	Cleaner	Vat #8	Two Cell Bright Nickel	Vat #15	Chrome
Vat #2	Rinse	Vat #9	Bright Nickel	Vat #16	Cyanide Copper
Vat #3	Soak	Vat #10	Bright Nickel	Vat #17	Rinse
Vat #4	Cleaner	Vat #11	S/B Nickel	Vat #18	Copper
Vat #5	Cleaner	Vat #12	Nickel Saver	Vat #19	N/A
Vat #6	Rinse	Vat #13	Rinse	Vat #20	Corrosive
Vat #7	Acid Salts	Vat #14	Chrome Saver	Vat #21	N/A

**NOTES:**  
Image Source:  
OEPA



Prepared For:  
**U.S. EPA REGION V**  
Contract No.: EP-S5-06-04

TDD No.: S05-0001-1006-039  
DCN: 1109-2A-AHFT



**WESTON SOLUTIONS, INC.**  
4710-A Interstate Drive  
Cincinnati, Ohio 45246



**Figure A-3**  
Site Features Map  
Plate-Right Plating Site  
Dayton, Montgomery County, Ohio

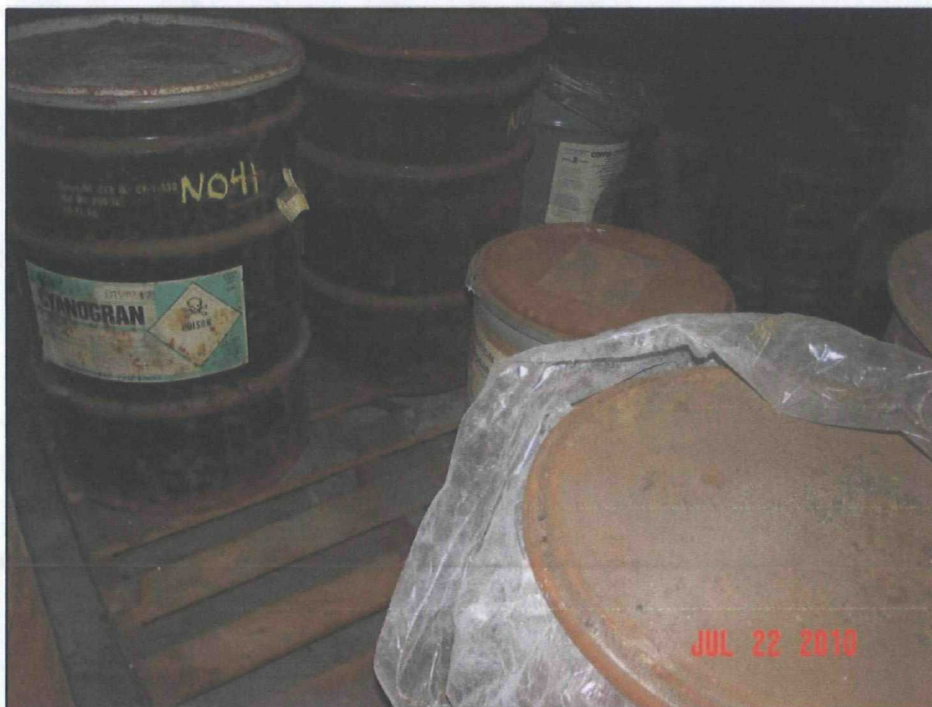


**FIGURE A-4**

**PHOTO LOG**



View of abandoned plating vats



View of drums containing cyanide



View of a leaking container



View of abandoned plating vats





View of abandoned drums and containers



View of an abandoned plating vat containing corrosive liquid

## **ATTACHMENT 1**

### **DETAILED CLEANUP CONTRACTOR COST ESTIMATE INDEPENDENT GOVERNMENT CLEANUP CONTRACTOR ESTIMATE**

#### **PLATE-RITE PLATING SITE DAYTON, MONTGOMERY COUNTY, OHIO**

**SEPTEMBER 2010**

The estimated cleanup contractor (ERRS) costs necessary to complete the removal action at the PR Plating Site are as follows:

Personnel & Equipment	\$302,353
Materials/Misc	\$ 72,000
Transportation and Disposal	+ <u>\$262,000</u>
 Total	 \$636,353
 Plus 15% Contingency	 \$ 95,453
 <b>Total ERRS Contractor Costs</b>	 <b>\$731,806</b>

## ATTACHMENT 2

### U.S. ENVIRONMENTAL PROTECTION AGENCY REMEDIAL ACTION

#### ADMINISTRATIVE RECORD FOR PLATE-RITE PLATING SITE DAYTON, MONTGOMERY COUNTY, OHIO

ORIGINAL  
AUGUST 2010

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	07/00/06	ATSDR	File	ToxFAQs Sheet for Cyanide CAS# 74-90-8, 143-33-9, 151-50-8, 592-01-8, 544- 92-3, 506-61-6, 460-19-5, 506-77-4	2
2	08/00/07	ATSDR	File	ToxFAQs Sheet for Arsenic CAS #7440-38-2	2
3	08/00/07	ATSDR	File	ToxFAQs Sheet for Lead CAS# 7439-92-1	2
4	09/00/08	ATSDR	File	ToxFAQs Sheet for Cadmium CAS# 7440-43-9	2
5	09/00/08	ATSDR	File	ToxFAQs Sheet for Chromium CAS# 7440-47-3	2
6	06/18/10	Lynch, M., Harrison Township Fire Dept.	Renninger, S., U.S. EPA	Letter re: Harrison Town- ship Fire Dept. Request for U.S. EPA Assistance at the Plate-Rite Plating Site w/Attachments	13
7	06/18/10	Renninger, S., U.S. EPA	Property Owner	U.S. EPA Access Agreement	1
8	06/22/10	Koch, T., Ohio EPA	Property Owners, Bon-Jur Co.	Notice of Violation Letter for the Master Vision/Bohn Jur Site	2
9	08/17/10	Clouse, K., Ohio EPA	Durno, M., U.S. EPA	Letter re: Ohio EPA Request for U.S. EPA Assistance in Conducting a Time-Critical Removal Action at the Plate- Rite Plating Site	1
10	08/24/10	Renninger, S., U.S. EPA	Combs, D., Ohio EPA	Letter re: U.S. EPA Re- quest that the Ohio EPA Identify any State ARARs Applicable to the Removal Action at the Plate-Rite Plating Site	2

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
11	00/00/00	Weston Solutions, Inc.	U.S. EPA	Site Assessment Report for the Plate-Rite Plating Site <b>(PENDING)</b>	
12	00/00/00	Renninger, S., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for a Time-Critical Removal Action at the Plate-Rite Plating Site <b>(PENDING)</b>	

## ATTACHMENT 3

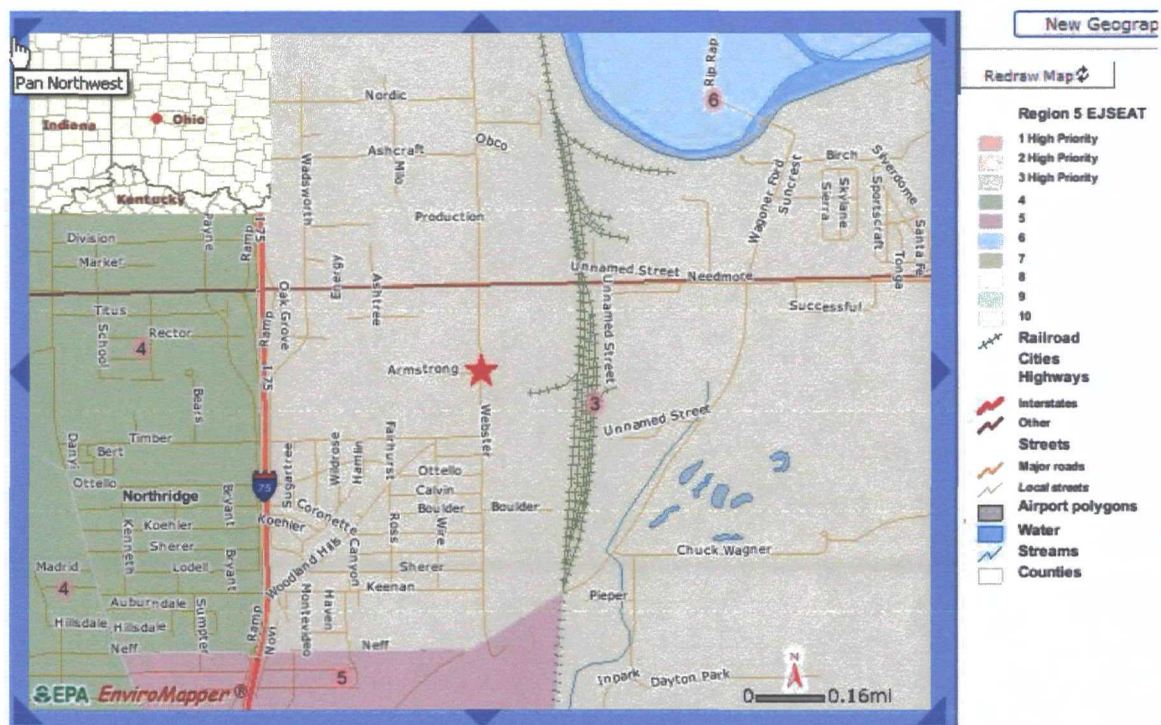
### REGION 5 EJ ANALYSIS

#### PLATE-RITE PLATING SITE DAYTON, MONTGOMERY COUNTY, OHIO SEPTEMBER 2010

The area surrounding the Plate Rite Site was screened for Environmental Justice (EJ) concerns using Region 5's EJ Assist Tool (which applies the interim version of the national EJ Strategic Enforcement Assessment Tool (EJSEAT)). Census tracts with a score of 1, 2, or 3 are considered to be high-priority potential EJ areas of concern according to EPA Region 5. The Plate Rite Site is in a census tract with a score of 3 (Figure 1). Therefore, Region 5 considers this site to be a high-priority potential EJ area of concern.

**Figure 1**

Plate Rite Site Map Showing EJ SEAT Values For Surrounding Area





**ATTACHMENT 4**

**INDEPENDENT GOVERNMENT COST ESTIMATE**

**PLATE RITE PLATING SITE  
DAYTON, MONTGOMERY COUNTY, OHIO**

**SEPTEMBER 2010**

**NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION**

**(REDACTED 3 PAGES)**